

## UNITED STATES ENVIRONMENTAL PROTECTION AGENCY REGION 10 OREGON OPERATIONS OFFICE

805 SW Broadway, Suite 500 Portland, Oregon 97205

September 22, 2010

Mr. Bob Wyatt Northwest Natural & Co-Chairman, Lower Willamette Group 220 Northwest Second Avenue Portland, OR 97209

Re: Portland Harbor Superfund Site; Administrative Order on Consent for Remedial Investigation and Feasibility Study; Docket No. CERCLA-10-2001-0240 General Responses to EPA Directed BHHRA and BERA Comments

Dear Mr. Wyatt:

On July 19, 2010, EPA submitted comments to the Lower Willamette Group (LWG) on the draft Portland Harbor Remedial Investigation Report. Included in these comments were approximately 80 directed comments on the baseline human health and ecological risk assessments (BHHRA and BERA). EPA and the LWG met to discuss these directed comments on August 20, 2010 and September 9, 2010. At the close of the second meeting, EPA and the LWG had reached agreements to resolve all the directed comments. The LWG provided a general framework for resolving EPA's directed comments on the BERA and BHHRA in a September 15, 2010 letter, based on the LWG's understanding of the agreements

EPA has reviewed the September 15, 2010 letter and attachments and agrees, with clarifications, that EPA's directed comments on the BERA and BHHRA should be revised in accordance with the general framework, and that the proposed resolution described in LWG's general responses matches our understanding of the meeting outcome. EPA clarifications are presented below:

- 1) Risk Management Recommendations: The results of the uncertainty analysis presented in the BERA and BHHRA should also be incorporated into the risk management recommendations. In addition, although EPA recognizes the difference in EPA policy with respect to risk management and the BERA and BHHRA, EPA would like the risk management sections for both the BERA and BHHRA to be presented together in either a stand alone document or as part of the risk assessment summary in the draft FS. EPA would like to further note that some chemicals without a strong tissue-sediment relationship may contribute substantially to the overall risk to human health and the environment based on the spatial extent and magnitude of the risk estimate.
- 2) Uncertainties that Contribute to Under Estimating Risk: It is unclear that "most" uncertainties discussed in the BERA will be described as resulting in overestimation of

- HQ's and risks. It is more accurate to say "many" uncertainties may result in overestimation of HQ's and risks.
- 3) Deletion of Language Regarding Compounding of Conservative Assumptions: EPA would like to note that it may be difficult to look at compounding risks in a quantifiable manner without performance of a probabilistic risk assessment.

Because we did not discuss all the directed comments, a final determination that the LWG has addressed the directed comments can not be made until a redline-strikeout version of the BERA and BHHRA reports are submitted. EPA expects that the general resolutions proposed in the September 15, 2010 letter will be incorporated into the revised BERA and BHHRA reports as appropriate.

Finally, EPA thanks the LWG for its efforts in working to resolve the directed comments. EPA looks forward to continued efforts on the LWG's part to resolve the non-directed comments on the draft remedial investigation and baseline risk assessment reports. If you have any questions this matter, please contact Chip Humphrey at (503) 326-2678 or Eric Blischke (503) 326-4006. All legal inquiries should be directed to Lori Cora at (206) 553-1115.

Sincerely,

Chip Humphrey Eric Blischke Remedial Project Managers

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